



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

cd

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,260	10/25/1999	FARHAD KHOSRAVI	239/227	2937

34313 7590 01/30/2004

ORRICK, HERRINGTON & SUTCLIFFE, LLP
4 PARK PLAZA
SUITE 1600
IRVINE, CA 92614-2558

EXAMINER

PELLEGRINO, BRIAN E

ART UNIT PAPER NUMBER

3738

DATE MAILED: 01/30/2004

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/427,260

Applicant(s)

KHOSRAVI ET AL.

Examiner

Brian E Pellegrino

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29,30 and 55-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29,30 and 55-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 3738

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/20/03 has been entered.

Drawings

The drawing correction for Fig. 9 was received on 11/20/03. This drawing is not acceptable because it is not clear how the locking elements would work with the wing-like elements since the wing-like elements permit flexibility. Additionally, there is no description of an embodiment of this combination of features.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 29,30,56,60 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a coiled sheet stent with stretchable or wing-like elements or a stent with locking elements, does not reasonably provide enablement for

the combination of features. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. It is not clear that the specification discloses a stent with wing-like elements and locking elements in combination and how it would even mechanically work. Variations or alternative embodiments are only permitted to be claimed where the species for which coverage is desired are taken from one true genus. *CARTER v. COLGATE*, 122 USPQ 175 (CA 4 1959).

Claim Rejections - 35 USC § 102

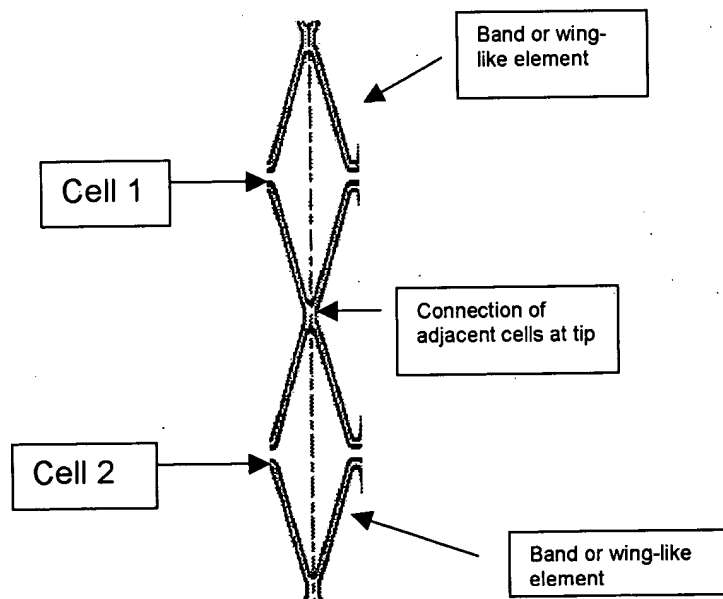
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 55,57,59,61,62 are rejected under 35 U.S.C. 102(e) as being anticipated by Fogarty et al. (5800520). Fig. 9A shows a stent with a plurality of stretchable elements biased to expand from a contracted condition or are in an unstretched condition. Fig. 9B illustrates the stretchable elements in the stretched condition. Fogarty et al. disclose the stent is formed from a coiled-up sheet having overlapping inner and outer longitudinal sections, that is unrollable to an enlarged condition, col. 5, lines 4-11. Fogarty also discloses the sheet is made of a shape memory material, i.e.

Nitinol, col. 6, lines 17-21. The sheet should be cooled at about 25 °C for martensitic transformation and heated to about body temperature for austenitic transformation, col. 6, lines 23-29. The examiner is interpreting the claimed "stretchable" or "wing-like" elements to be the legs of the cells in this way: since the cells can be considered to be evenly divided, the band members (4 per cell) extending outward from the center of the cell form two wings similar to an airplane's wings. Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fogarty et al. '520 in view of Gray et al. (5895406). Fogarty is explained supra. However, Fogarty does not disclose the wing-like elements comprising a pair of longitudinal elements defining an undulating pattern. Gray et al. (Fig. 6) show a stent with wing-like shape formed of a pair of longitudinal elements defining an undulating pattern. Gray et al. teach this stent pattern provides good axial flexibility, col. 2, lines 27-34. It would have been obvious to one of ordinary skill in the art to incorporate the undulating pattern in the longitudinal members as taught by Gray et al. in the stent of Fogarty such that it has greater axial flexibility.

Claims 29,30,56,60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fogarty et al. '520 in view of Khosravi et al. (5441515). Fogarty is explained supra. However, Fogarty does not disclose a plurality of locking elements extending from the inner section to the outer to secure the stent in the enlarged condition. Khosravi et al. teach (Figs. 4,5) a coiled sheet stent with a plurality of locking elements **25** that extend from the inner section to the outer section and secure the stent in an expanded condition. It would have been obvious to one of ordinary skill in the art to incorporate a plurality of locking elements in the coil sheet stent as taught by Khosravi et al. in the stent of Fogarty such that it remains in the enlarged condition and does not unravel in the patient.

Response to Arguments

Applicant's arguments filed 11/20/03 have been fully considered but they are not persuasive. As mentioned above, it is the Examiner's position that the specification does not disclose the combined teaching of wing-like elements with locking elements and the amended Fig. 9 is new matter. After further review also, Fogarty can be interpreted in its broadest reasonable sense to anticipate the claims, since the limitation "wing-like" is broad. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the features of either Gray or Khosravi can be said to improve the stent of Fogarty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E Pellegrino whose telephone number is 703-306-5899. The examiner can normally be reached on Monday-Thursday from 8am to 5:30pm. The examiner can also be reached on alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached at 703-308-2111. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

TC 3700, AU 3738

Brian E. Pellegrino

